

## Joint MPH Program

University of Gondar and Addis Continental Institute of Public Health

Assessment of the Provision and Utilization of Provider initiated HIV testing and counseling services (PITC) and Factors affecting the Utilization of PITC among outpatient department patients in Addis Ababa.

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Declaration page

### *Declaration*

*I, the undersigned declare that this thesis is my original work in partial fulfillment of the requirement for the degree of Master of Public Health. I also declare that it has never been presented in this or any other university and that all resources and materials used in the thesis have been duly acknowledged.*

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## **ABBREVIATIONS**

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
ANC	Antenatal clinic
CDC	Centre for disease control and prevention
OPD	Outpatient department
HIV	Human immunodeficiency virus
FMOH	Federal ministry of health
HCT	HIV counseling and testing
WHO	World health organization
UNAIDS Joint	United Nations program on HIV aids
PITC	Provider initiated HIV testing and counseling
GIT	Gastro-intestinal
TB	Tuberculosis
STI/STD	Sexually transmitted infection
VCT	Voluntary counseling and testing
PLHIV	people living with HIV
MOH	Ministry of health
HAPCO	HIV/AIDS prevention and control office
PMTCT	Prevention of mother to child transmission
OR	Odds ratio
CI	Confidence interval
AOR	Adjusted Odds ratio
GOU	University of Gondar
ACIPH	Addis continental institute of public health

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## ABSTRACT

**Back ground:** HIV screening is recommended by the health care providers as standard medical care to detect unrecognized HIV infections and to create linkage to care, treatment and support services for patients attending health facilities.

**Objective:** this study was designed to determine the magnitude of provision and utilization PITC service and identifying factors that influence the acceptance of PITC services among outpatient department patients.

**Methods:** facility based cross sectional study was conducted on 844 patients attending outpatient department in Addis Ababa at five hospitals using pre-tested structured questionnaires from February-March, 2011.

**Results:** The majority 61.6 % ( 475) of respondents were females and their mean age were  $33.5 \pm 12.6$ (SD) years. The overall utilization rate was 27% and only 36.7% was offered HIV testing and counseling by service providers. Patients offered HCT by providers were five times more likely to accept HIV testing and counseling with {AOR 95%CI=4.8(2.7, 8.5)}. Those patients who did not know whether healthy looking persons can have HIV infection and patients who were willing to maintain their relationship if their partners become HIV positive were less likely to accept PITC with {AOR95%CI=0.15(0.04, 0.52)} and {AOR95%CI=0.53(0.30, 0.94)}. Patients who had knowledge about healthy looking persons can have HIV infection had high PITC acceptance with {AOR95%CI=2.01(1.01, 4.01)}. Patients from private facilities were accepted PITC less than the public facilities {AOR= 0.38(0.21, 0.67)}. primary and tertiary education had lower PITC acceptance rate with {AOR95%CI=0.17(0.04,0.71) and 0.25(0.07,0.93)}. And patients having monthly income of 500- 1000birr were more likely to be tested as compared to those who had lower income with {AOR95%CI =4.32(1.31,14.2)}. Being house wife by occupation had higher PITC acceptance with {AOR=3.95, 95%CI= (1.02, 15.3)}. The availability of free ART had higher PITC acceptance rate with {AOR95%CI= 2.2(1.02, 4.63)}.

**Conclusions and recommendations:** The provision and utilization of PITC in the outpatient department was low. So all providers should follow the guide lines and offer HIV testing to all patients visiting health facilities irrespective of risk behaviors.

## 1. INTRODUCTION

### 1.1 problem statement

AIDS is the global pandemic with cases reported from every country. In 2008 33.8 million PLHIV( 31.3 million adult ) and 2.7 million new infections and 2 million deaths (1.7 adults) in the year (1) . Sub-Saharan Africa bears the burden of the global epidemic about two thirds (68%) of all adults and children with HIV globally live in sub-Saharan Africa (2).

Ethiopia is one of the most affected sub-Saharan countries. In 2008/09 using sample testing estimate adult HIV prevalence is 2.4%(3). There is 1,116,216 PLHIV;131,145 new HIV infection and 44,751 AIDS related deaths(4) and HIV incidence since 2005 was 0.26%(5). The HIV/AIDS epidemic in the country is classified as “generalized” among the adult population and continues to impact every sector of society with huge regional, urban-rural and sex differentials. The 2009 estimated prevalence for urban7.7%, rural 0.9%, males 1.8% ,females 2.8%and women accounted for 59% of the HIV-positive population (3, 4).

Client-initiated HTC refers VCT is initiated by clients seeking to know their HIV status. HIV testing in VCT is considered public or social testing and constitutes a prevention strategy (6-8).Typically, VCT emphasis on tailored risk reduction counseling to help the client identifies a plan for the prevention of HIV transmission (6-8).VCT has been until recently, the primary model for providing HIV testing and counseling but uptake of VCT has been limited by low coverage of services, fear of stigma and discrimination, and lack of perception by many people even in high prevalence areas (6, 7, 9, 10).

In 2006 survey from several sub-Saharan African countries showed that only 10% of men and 12% of women had been tested for HIV, implying that most of HIV-infected persons are unaware of their status (11). Many patients know their HIV diagnosis at a late stage of the disease after repeated clinical visits to the health care system, representing missed

opportunities for counseling and testing and sub-optimal therapeutic response due to advanced immune-suppression (12-14). Concerned by late diagnoses of HIV infection and a high proportion of people unaware of their HIV status, and people who are aware of their HIV status reduce risk behaviors, CDC issued revised guidelines in September 2006 recommending “HIV screening” for all persons aged 13-64 years attending health facilities in the United States(6, 15) and in 2007 " WHO, UNAIDS and CDC" has developed guidance on PITC in health facilities to improve HIV diagnosis, treatment and care and to expand the availability and uptake of PITC in clinical settings(6).

Provider initiated HIV testing and counseling refers to HCT is recommended by health care providers to persons attending health care facilities as a standard component of medical care. PITC is voluntary not compulsory or mandatory testing and the “three C’s” – informed consent, counseling and confidentiality must be observed at all times and patients should never be forced to undergo testing against their will (6-8).

PITC also aims to identify unrecognized HIV infection in persons visiting health facilities and is the critical entry-point for treatment, care and prevention efforts. Therefore, health care providers may recommend HIV testing and counseling to all patients even if they do not show obvious HIV-related symptoms. It is a basic responsibility of health care providers to recommend HCT as part of the patient’s routine clinical management in persons presenting to health facilities with symptoms or signs of HIV illness and failure to recommend is substandard medical practice (6-8) .

PITC has two approaches. Opt -in - patients must affirmatively agree to the test being performed after pre-test information has been received. Opt -out - individuals must specifically decline the HIV test after receiving pretest information if they do not want the test to be done(6, 8). The most important motive for routine PITC is to increase the number of patients tested, to identify HIV patients at early stage of the disease and to link to medical

care and support services (6, 14, 16). PITC has contributed to the reduction of stigma associated with HIV/AIDS, promotion of behavior change and facilitated access to prevention, care and treatment for PLHIV (6, 9, 11, 17)

In 2004, Botswana has introduced PITC in systematic fashion and the program revealed a dramatic increase in testing: from 60,846 in 2004, to 157,894 tested in 2005, and to 88,218 in 2006(18). Similarly, in Kenya, an emergency department-based routine PITC program demonstrated a 97% testing acceptance rate with 82% of HIV infected patients attending their first post-test follow up clinic visit (19).

## **1.2 Justification for the study**

Testing all patients routinely for HIV in settings with generalized HIV epidemics like Ethiopia has the benefit of diagnosing the infection early and thereby preventing morbidity, mortality and reducing transmission through initiating prophylaxis, management of opportunistic infection and timely ART (16, 20). The uptake of PITC varies from 12% to 98% across different settings, patients' categories and the testing approach used (21, 22). The HIV test uptake increased from 12-62% to 70-98% using an "opt-in" (15, 23) and "opt-out" approach respectively (9, 17).

The availability of HCT services in Ethiopia has been uneven and even when available, uptake has been relatively low and most of patients presented to health facilities were at late stage of the disease resulted in poor management outcome. Therefore, identifying the utilization and factors affecting acceptance of PITC may have contribution in increasing and integrating the response to HIV/AIDS epidemic as well as in planning strategies to increase the uptake of PITC services among patients visited outpatient department.

## **2. LITERATURE REVIEW**

### **HIV testing in Ethiopia**

The availability of HCT services in Ethiopia has been uneven, and even when available, uptake has been relatively low. Comprehensive knowledge about HIV prevention and transmission is still shallow. Many people are reluctant to learn their HIV status when medical care for HIV-related illnesses and psychosocial support does not exist, and in the absence of community support and legal protection when they face discrimination and social marginalization(8).

The HCT program has shown considerable improvement both in terms of service expansion as well as utilization. A total of 5.8 million people (53% male) received HIV counseling and testing in 2008/09. Ethiopia responded to the HIV/AIDS epidemic as early as 1985. The Federal MOH and HAPCO developed an HIV/AIDS policy, different guidelines (PMTCT, ART, IP, VCT etc) and strategic documents for the implementation of HIV prevention, care, treatment and support programs. The first counseling and testing guidelines were published by FMOH in 1996 and the second edition, currently in use, in 2002(8).

The guideline encourages HCT to patients who do not exhibit obvious HIV symptoms and signs as part of a package of services provided to all patients during all clinical interactions in the facility. Persons 15 years and above are considered mature enough to give informed consent for themselves. However, children aged 13-15, who are married, pregnant, commercial sex workers, street children, heads of families are regarded as "mature minors" who can consent to HIV testing(8).

### **The significance of PITC services**

#### **1. Increased uptake of HIV testing**

A comparison of three models of provider-initiated HIV testing and counseling in tuberculosis clinic in Congo found that more than two-thirds of clients preferred “opt-out” testing where the test would be performed unless they declined(24).Evidence from both

resource-rich and resource-poor settings indicated that the uptake of testing increases when testing is routinely offered, and well-integrated into prenatal care and in settings other than pre-natal care. Comparisons of data collected before and after the introduction of PITC consistently showed significantly higher uptake, as documented; hospitalized patients in Zambia(25); Ugandan maternity ward(26);and south African pediatric wards(27).

A controlled trial in South Africa on the impact of opt-out HIV testing and counseling among STI patients revealed that a higher proportion of new STI patients tested for HIV in the intervention group than control group with (56.4% versus 42.6%)and HIV testing were more offered in intervention 76.8% than in the control group 50.9% (28). A comparative study in Botswana on attendance and acceptance of HIV tests in antenatal clinics showed the proportion tested increased from 75% to 91%and the attendance rates and the return rate for their test result were also increased(29).

## **2. Facilitate patient's access to HIV prevention, treatment, care and support services.**

PITC presents an opportunity to diagnose HIV systematically in health care facilities in order to facilitate patient's access to needed HIV prevention, treatment, care and support services (6) .A study in Kenya on (TB)/HIV pilot program targeting patients with TB and suspected TB for PITC showed that the overall HIV prevalence among TB patients was 53%. 81% of co-infected patients were referred for HIV care, 69% starting CTX prophylaxis and 41% starting ART. The overall HIV prevalence among suspected TB patients was 62%. The prevalence of HIV among patients diagnosed with TB disease in this period was 61%, which was not statistically different from the 62% among patients without confirmed TB disease(30).

A study in Uganda hospitals on offering routine testing to inpatients and their family members in medical and surgical units had revealed a test acceptance rate of 98%, and 81% of those had not been tested previously. HIV prevalence was 25%.,which represents a

significant opportunity for prevention and offer treatment to the HIV-infected member of the couple(20). Another study in India on feasibility of PITC in detecting HIV-infection in TB patients and the efficiency of linkage to HIV care and treatment for HIV infected TB patients, showed that HIV status was ascertained for 70% of TB patients. Previously undiagnosed HIV-infection was detected in 6.4% of those TB patients newly tested, enabling referral for anti-retroviral treatment (31).

### **Factors affecting Utilization of PITC services**

The Uptake of provider initiated HIV testing and counseling has been also hampered by many of the same factors that limit uptake of client-initiated HIV testing and counseling including stigma and discrimination, limited access to treatment, care and health services in general, as well as gender issues(6, 8). A survey in four-Asian countries showed that women were more likely to seek HIV testing and counseling because their partner was ill, representing failures of diagnosis, prevention, treatment and care(32). Underestimation of personal risk for HIV is also a frequent obstacle to uptake of client - initiated HIV testing and counseling, especially on the part of men (33-35).

A research in USA on Review of the Social and Behavioral Evidence for the Utilization of HCT revealed that constraints of training, time, and resources limit providers' ability to offer quality services. clients' attitudes and perceptions, the emotional connotations of HIV tests, gender differences in motivations for and consequences of testing, and stigma and negative reactions to disclosure; and practices related to confidentiality and consent have an effect on the utilization of testing(35). Another study in Ethiopia on Predictors of HIV testing among TB patients showed that the uptake of HIV testing was 70.6%. TB patients with formal education, high awareness about the benefits of HIV counseling and testing, and a low stigmatized attitude were more likely to accept HIV testing. The qualitative study also revealed low awareness, stigma, Knowledge and attitude" factors were the major reasons for

non-acceptance of HIV testing (36). A research in Addis Ababa to assess uptake of PITC among OPD clients with clinical signs of HIV infection showed that the overall acceptability rate was 67% and the age group 15-24, and 25-34 years old have higher rate of willingness and acceptability. But those who had "less" support for PITC were less likely to be willing and to accept the test than who supported it extremely (37). Another study in Adama on acceptability of PITC among TB patients showed that 81% had accepted PITC, and providers, the younger and the middle age group and education were factors positively associated with PITC acceptability. But a merchant by occupation and Individual risk perception was a major barrier for PITC acceptability(38).

A cross-sectional survey on postnatal women in rural Zimbabwe in 2004 showed 89.0% accept opt-out testing. The previous HIV test acceptance(97% v 76%), Younger age, living with a partner, secondary level or higher education, and knowledge about availability of PMTCT services were associated with increased acceptance of PITC(39). Another study in South Africa on the yield of a routine VCT compared with PITC in OPD showed that 48.6% acceptance rate. Lack of confidentiality, fear of stigmatization, inability to enter treatment if infected, and inconvenience of testing sites, and patients low self risk perception for HIV citing reasons: not at risk, tested before, and I am too old were the reasons for poor VCT participation(40).

A study in Zambia to examine factors affecting readiness for and acceptability of VCT showed that the acceptability was 11.8% among the group at clinic setting compared with 55.8% for the group at an optional location. Perceived risk of HIV infection among young people 20–24 years and declining general health status and ever HIV tested among older age 40–49 years had a major influence on VCT readiness (41). A retrospective study in Cameroon to Assess the accessibility of HIV care packages among TB patients showed that the rate of acceptance was significantly higher among patients in the public hospital



compared to those in the faith-based hospitals (42). Another study in Addis Ababa on factors determining acceptance of VCT among pregnant women attending antenatal clinic showed that Women with better education, married, with higher income, whose husbands live at home and better knowledge of VCT had significantly higher VCT acceptance than their counterparts(43).

A study in North and South Gondar on factors affecting acceptance of VCT among different professional and community groups demonstrated that 82% respondents were willing to accept VCT services. The age group in 15-19 years, the availability of ART and social factors (friends, families, religious leaders, and couples) were found to have statistically significant towards VCT acceptance. The absence of community support was found to be negatively associated with VCT acceptance (44). Another Study in Dire Dawa on determinants of VCT acceptance among antenatal clinic attendees showed that 30.3% of the respondents had Low risk perception of acquiring HIV and high perceived risk did not associate with PITC acceptance. Partners support for HIV test, employed women and Women with higher income were more likely to accept the test than their counter parts(45).

A research done in rural Thailand on Community-based VCT revealed that the main reasons to seek HIV testing were a desire to know their HIV result (53.3%) and recently engaging in risk behaviors (24.2%). Risk perception for HIV was a major motivator for seeking HIV testing. Perceived non-risk for HIV infection was cited by 34.9% of non-testers for not seeking VCT (46). A study in Nigeria on the Acceptability of VCT for HIV among Women Attending ANC showed 18.4% low risk perception and Increasing educational level were negatively associated with PITC acceptance(47). A study from Kenya on determinants of VCT identified that the rich and more educated were more likely to use VCT services but Women from male headed households were less likely to use VCT services(48).

### **3. OBJECTIVES**

#### **3.1 General objectives:**

To assess provision and utilization of provider initiated HIV testing and counseling (PITC) and factors affecting its acceptance among patients visiting outpatient department in five hospitals in Addis Ababa.

#### **3.2 Specific objective:**

1. To assess provision of provider initiated HIV testing and counseling services by health care providers.
2. To measure the magnitude of utilization of provider initiated HIV testing and counseling.
3. To identify factors influencing utilization of provider initiated HIV testing and counseling.

## **4. METHODS AND MATERIALS**

### **4.1 Study setting-**

The study was conducted in Addis Ababa private and government hospitals from February to March, 2011. Addis Ababa is capital city of Ethiopia with the total population of 3 millions according to 2008 census. In Addis Ababa there are 10 governments and 15 private, a total of 25 hospitals rendering PITC services. St Peter and Gandhi hospitals working as TB and Obstetric centers respectively were not included in this study. There is a well established HIV testing practice in these specific centers because TB and obstetrics are considered as high risk area.

### **4.2 Study design:**

Facility based cross sectional study design with internal comparison was used.

### **4.3 Source –population:**

The source population was all adult patients who were visiting medical outpatient department in government and private hospitals in Addis Ababa during the study period.

### **4.4 Study population:**

All patients above 15 years coming to the selected five hospitals during the study period were the study population.

### **4.4 Sample size and Sampling procedure:**

#### **4.4.1 Sample size determination**

There was no study done on provision of provider initiated HIV testing and counseling in the general outpatient department in our health facilities, therefore, in order to get a maximum sample size, We assumed that 50% of patients visiting health facilities offered

routine HIV testing and I also took 67% utilization rate (uptake) from a research done in Addis Ababa with p-value 0.05 and margin of error 5%. And non response rate of 10% was included in the study.

$$n = \frac{Z^2 p(1-p)}{d^2} \quad \text{Where,}$$

n= the desired sample size

z = the desired level of confidence interval 95% (1.96)

P1=the proportion of patients offered the PITC services by the health care providers.

P2= proportion of patients utilized the PITC services

d= margin of error 5% (0.05)

The sample size for the provision of PITC Using single population proportion formula was 384. And the sample size for the utilization of PITC was 340 and the maximum sample size 384 was taken to get representative sample size with design effect of the study =2. Hence a total of 844 patients were included in the study. Proportional averages of patients were allocated for each health facility.

#### **Inclusion criteria:**

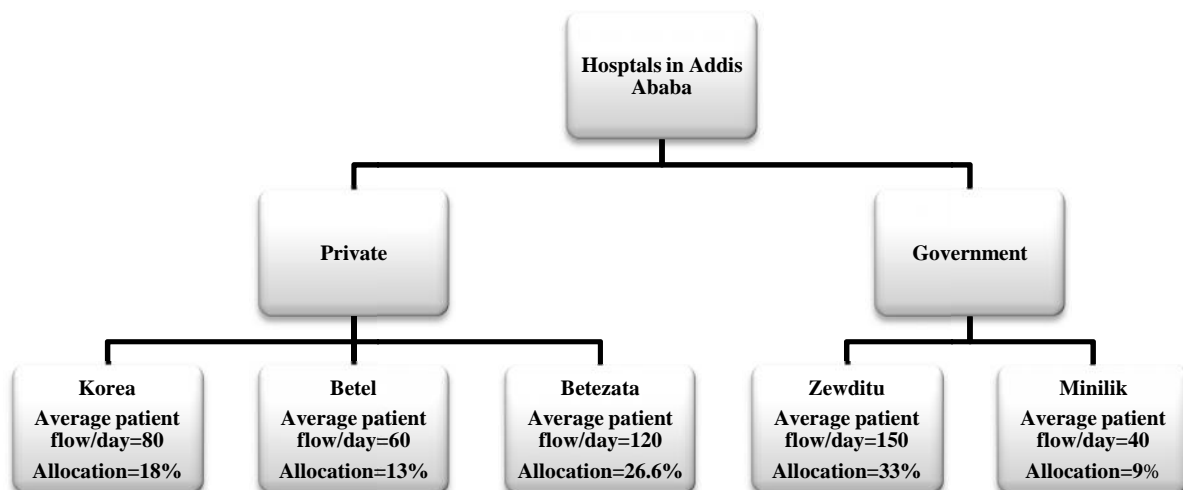
Any patient above 15 years old coming to the health facilities for medical care was included in the study.

#### **Exclusion criteria:**

HIV positive patients who have follow up at ART clinic for treatment and care, patients at TB clinics, patients with diminished capacity, and those who cannot stay interview time for different reasons was not included in the study.

#### 4.4.2 Sampling procedure:

A multistage sampling was employed by assuming that all government and private hospitals share common characteristics. And considering the time constraints and cost burden, proportional number of hospitals two from government and three from private were selected using simple random sampling technique (lottery methods). The total sample sizes were allocated to each health facilities based on previous census. I reviewed the number of average daily patient census served in each hospital in the previous one month. Zewditu hospital has served the highest number of patients on average 150 patients per day followed by Bethezata hospital 120 patients per day, Korean hospital 80 patients per day, Betel hospital 60 patients per day and Minilik hospital 40 patients per day. A systematic sampling method was employed to select representative sample of patients attending outpatient department and every fourth Patient coming to the selected hospitals for services during data collection period was interviewed until the allocated proportion reached.



Total days- $7 \times (150+40+120+60+80)/844=4$  was sampling interval using Systematic sampling.

**Figure 1. Schematic presentation for sampling procedure of the utilization and provision of PITC in Addis Ababa, April, 2011.**

#### **4.5 Data collection tools and procedure**

The data was collected using a structured questionnaire which was adopted based on similar studies (33, 49-51) and Patient exit interview was conducted after finishing their medical examination. The questionnaire addressed socio-demographic data, medical and other related factors, behavioral factors and previous sexual practice and perceived susceptibility of the participants. Ten professional nurse data collectors and five supervisors working at head nurse in each hospital were selected. Both the data collectors and supervisors were given one day training by principal investigator on the data collection instruments, method of data collection and ethical issues. The responsibility of data collectors were to fill questionnaires after obtaining verbal consent of the study subjects when patients coming out after finishing medical examination. Whereas supervisors were supplied all necessary items for data collection on each data collection day, collect filled questionnaires and solve problems raised during data collection.

#### **4.6. Study variables**

##### **Dependent variables**

The dependent variables of the study were utilization and provision of provider initiated HIV testing and counseling by patients visiting health facilities.

##### **Independent variables**

The explanatory variables that influence utilization of provider initiated HIV testing and counseling were selected on the basis of the literature review. These factors can be categorized into socio-demographic, knowledge of methods of HIV prevention, attitude and practice, medical and psychosocial related factors and behavioral factors.

1. Socio-demographic variables:

- Age
- Sex
- Level of education
- Ethnicity
- Marital status
- Occupation
- Income level
- Religion

2. Comprehensive knowledge of HIV

- Knowledge of methods of HIV prevention and means of HIV transmission
- -knowledge of people living with HIV and died of HIV.

3. Attitude and testing practice towards HIV

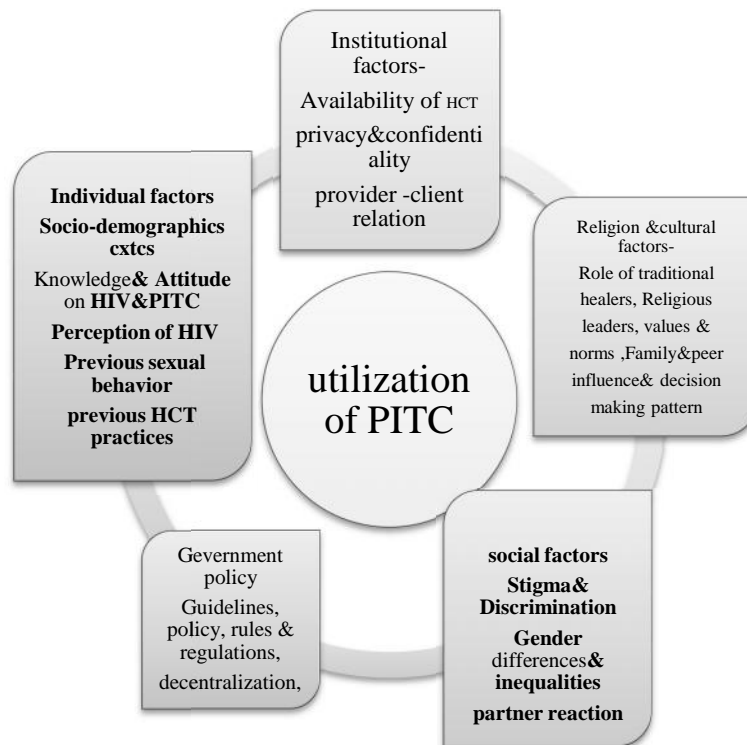
- previous history of HIV testing
- Willingness to test for HIV because of availability of ART
- willingness for PITC
- Disclosure positive results to partners/family members
- willingness to let partners/family members to use PITC

4. Risk perception and risk behaviors

5. Stigma and discrimination

6. Type of health facilities and reasons for attending the health facilities.

## Conceptual frame work of factors affecting utilization of PITC



### 4.7. Data Quality

The data quality was secured by giving one day training to data collectors and supervisors. Pre-test on the Amharic version of the questionnaire was also done on 20 patients at the Zewditu hospital to ensure whether the questionnaires were well understood by both the patient and data collectors and to make necessary correction ahead of data collection started. Based on that, modifications were made and data was collected using the modified Amharic version. The interview was conducted at private room to create conducive environment to get reliable information and health care providers were also blinded for data collection procedure. Close supervision by supervisors and principal investigator were made. The questionnaire was checked for completeness, clarity and consistency by the principal investigator before data entry.



#### 4.8 Data analysis

The data was checked for completeness before data entry and Epi-info 3.5.1 was used for data entry. And the data was cleaned and transferred to SPSS using stat transfer and transformed to meaningful data after recoding and finally analyzed by SPSS version 15.0. A step wise logistic regression was used. Multivariate analysis for  $p\text{-value} < 0.1$  on bivariate analysis was used for comparison of association of results and controlling of confounding factors among the variables. The study findings was compiled and presented using tables, figures and statements.

#### 4.9 Operational definitions

**Missed opportunity for HIV test-** opportunities missed to HCT patients visiting health facilities due to lack of initiation by health care providers.

**Willingness to accept PITC** - Patients will/support for HIV testing initiated by providers.

**Utilization/ Acceptances of PITC-** Patients accepted and tested for HIV among those offered PITC services.

**Provision of PITC-** Any patients visiting health facilities offered PITC services by health care providers.

**Compulsory HIV testing-** can only be performed for specific reasons with individuals or groups when requested by the court.

**Mandatory HIV testing** -screening of donated blood/organ/tissue prior to all procedures involving transfer of body fluids or body parts, such as artificial insemination, corneal grafts, organ transplant and blood transfusion.

**Initial acceptance-** patients who accepted HIV test to be done divided by total patients counseled by providers.

**Overall acceptance-** total patients tested for HIV divided by total patients counseled.

#### **4.10. Dissemination of results**

Primarily the thesis will be presented to Gondar University and Addis continental institute of public health for partial fulfillment of the degree of Master of public health. Then, the findings of this study will be communicated with school of public health to Addis Ababa Regional Health Bureau, and Federal Ministry of Health (FMOH). Additionally, the research also will be presented to different governmental and non -governmental organization that could potentially benefit from the study out come and will be submitted to local journals for publication.

#### **5. ETHICAL CONSIDERATIONS**

The study was conducted after ethical clearance obtained from the Institutional review board of Gondar University and Addis Ababa health bureau. Then a formal supporting letter that explains the Objectives, Rationale and expected outcomes of the study was written to the study area from Addis continental institute of Public Health and Gondar University and also from Addis Ababa health bureau which requests cooperation. Accordingly, permission was obtained from medical directors of each health facility. The informed consent was obtained from each participant after discussing the purpose and the type of study to be done and the expected risk and beneficiary of the study. In addition, participants were told about their rights not to participate in the study, to escape questions or to stop the study without any harm. During the interview participant's privacy were maintained and confidentiality was secured by avoiding personal identifiers and storing the data in safe and protected places which is out of reach for other persons.

## **6. RESULTS**

From the total of 844 study subjects 772 were interviewed and the response rate was 91.5%. About 36.9% (285) of respondents were from Zewditu hospital, 21.2 % ( 164) were from Bethezata hospital, 17.8 % ( 137) from Korean hospital and the remaining 14.5 % ( 112) from Betel hospital and 9.6 % ( 74) were from Minilik hospital.

The majorities 87.1% of respondents were from Addis Ababa and 66.6 % were females. The mean age of respondents was  $33.5 \pm 12.6$  years (SD) and 38.4% were b/n 25 -34 years and 52.6% were married. About 44.6% of respondents were in tertiary level of education. The majority 68.5% (529) of the study subjects were orthodox Christian and 47.2 % ( 364) of were Amhara by ethnicity. About 66% of respondents were employed and 32.5% (250) were getting the monthly income above 1500 birr. The female gender, patient residence, age, education, occupation, marital status and monthly income of the family were not revealed any statistically significant association to the acceptability of provider initiated HIV testing and counseling when adjusted for socio-demographic variables (table 1).

Table 1: Distribution of Socio-demographic characteristics VS PITC acceptance among OPD patients in Addis Ababa April, 2011(n=772).

Variables	PITC acceptance		Total		Crude OR(95%CI)	Adjusted OR(95%CI)
	Yes	No	No	%		
Address						
urban	94	577	671	87.1	0.95(0.51,1.77)	1.3(0.62,2.74)
rural	13	84	99	12.9	1	
Sex						
male	46	249	296	38.4	1	
female	62	412	475	61.6	0.82(0.539,1.23)	0.60(0.36,1.01)
Age						
15-24	16	157	173	22.5	0.65(0.237,1.76)	0.97(0.286,3.34)
25-34	49	247	296	38.4	1.3(0.504,3.134)	1.92(0.70,5.32)
35-44	24	143	169	21.9	1.06(0.406,2.79)	1.36(0.47,3.94)
45-54	11	73	84	10.9	0.95(0.328,2.78)	1.04(0.33,3.28)
>55	6	38	44	6.2	1	
Marital status						
single	35	264	300	39	1	
married	67	337	405	52.6	1.50(0.97,2.33)	1.4(0.82,2.34)
Divorced/widowed/separated	6	59	65	8.4	0.77(0.31,1.907)	0.84(0.30,2.35)
Education						
Illiterate	8	40	48	6.2	1	
Read-write	6	25	31	4.0	1.2(0.37,3.868)	0.99(0.28,3.59)
primary	23	110	134	17.4	1.05(0.433,2.53)	0.54(0.19,1.57)
secondary	33	180	213	27.6	0.92(0.394,2.13)	0.65(0.23,1.8)
tertiary	38	305	344	44.6	0.623(0.27,1.43)	0.38(0.12,1.22)
Occupation						
employed	55	355	410	53.1	0.67(0.28,1.63)	0.78(0.38,1.59)
housewife	16	89	105	13.6	0.80(0.30,2.1)	1.5(0.61,3.66)
student	9	76	85	11	0.52(0.18,1.5)	0.71(0.07,6.98)
merchant	12	62	74	9.6	0.86(0.31,2.4)	0.78(0.306,2.0)
unemployed	9	49	59	7.6	0.81(0.28,2.4)	0.89(0.24,3.28)
Daily laborer/farmer/maid servant	7	31	39	5.1	1	1

Monthly income(in birr)						
<300	10	60	70	11.1	1	
300-500	23	85	108	17.1	1.6(0.7,3.66)	1.89(0.77,4.66)
501-1000	16	74	90	14.3	1.3(0.55,3.07)	1.0(0.34,2.91)
1001-1500	11	102	113	17.9	0.65(0.26,1.6)	0.99(0.34,2.86)
>1501	38	211	249	39.6	1.08(0.51,2.3)	1.59(0.63,4.04)

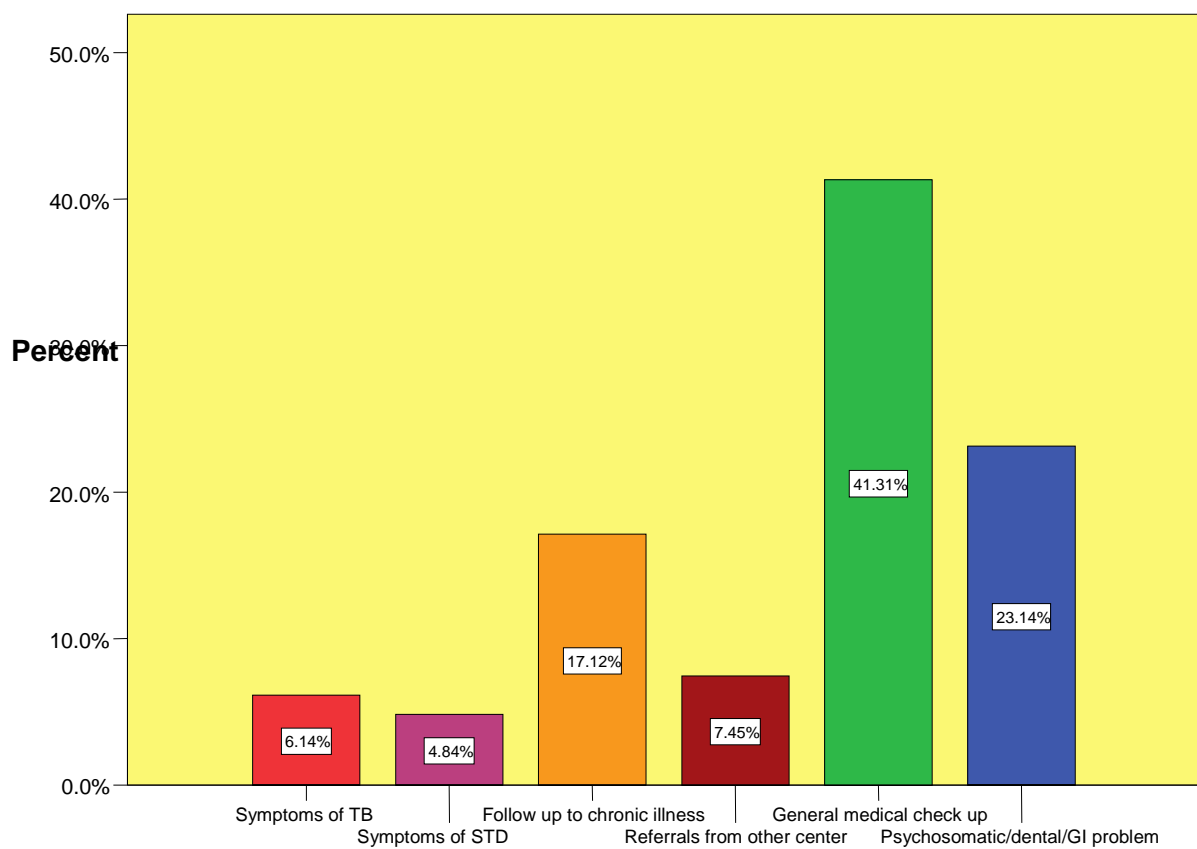
**\*=Statistically significant when  $p < 0.05$**

**\*=1.0 indicates that referent group**

**\* =All variables were adjusted for socio-demographic, knowledge, attitude, practice and perception variables**

## Reasons for attending the health facilities among OPD patients

The majority of patients visiting the health facilities were for general check up 41.3%, follow up to chronic illness clinic 17.12% and psychosomatic and gastrointestinal problems 23.14%.



**Figure 2: Reasons for attending the health facilities among OPD patients in Addis Ababa, April, 2011.**

### **Knowledge and attitude towards HIV/AIDS on PITC acceptance among OPD patients**

In assessing the Knowledge of the study subjects 99.4% (766) had heard information about HIV/AIDS, knew people living with HIV and died of HIV. About 93.9 % ( 725) respondents knew three means of HIV transmission and 91.9% (524) mentioned three methods of HIV prevention. Among the respondents 65.9% (506) were willing to maintain the relationship if their partners become HIV positive. The majority 77.3% (596) of the study subjects were willing to get tested for HIV because of the availability of free ART services while 83.5%( 644) of the respondents were willing to tell to their close friends or partners if they become HIV positive. About 83.5 % ( 643) were willing to let partners or family members to use PITC services. Only 59.6% (460) of respondents had knowledge of a healthy looking persons can have HIV infection (table 2).

The study subjects who were willing to maintain the relationship if their partners become HIV positive were found to have negative association to the acceptance of PITC with {OR 95%CI= 0.47(0.27, 0.81)}. Patients who did not know whether healthy looking persons can have HIV infection showed a negative association with PITC acceptance and the relation was statistically significant with {AOR 95%= 0.311(0.12, 0.80)}. Knowledge of HIV transmission and prevention, Knowledge about HIV, willing to let partners or family members to use PITC, willing to tell HIV positive results to partners did not show statistically significant association to PITC acceptance (table 2).

Table 2: patient's knowledge and attitude towards HIV /AIDS on PITC acceptance among OPD patients in Addis Ababa, April, 2011.

Variables	PITC acceptance		Total		Crude OR(95%CI)	Adjusted OR(95%CI)
	Yes	No	No	%		
Knowledge of HIV transmission						
yes	103	620	725	93.9	1.40(0.54,3.6)	1.7(0.41,6.93)
no	5	42	47	6.1	1	
knowledge for HIV						
yes	107	1	766	99.4	0.65(0.07,5.9)	0.21(0.01,3.5)
no	657	4	5	0.6	1	
Knowledge of HIV prevention						
yes	56	466	524	91.9	0.80(0.33,2.0)	0.78(0.31,2.0)
no	6	40	46	8.1	1	
Will you maintain your relationship If partner become HIV positive?						
yes	61	443	506	65.5	<b>0.64(0.42,0.97)</b>	<b>0.47(0.3,0.81)</b>
no	47	219	266	34.5	1	
If free ART is available, will you test for HIV?						
yes	93	501	596	77.3	0.26(0.07,1.05)	0.73(0.32,1.6)
no	10	81	91	11.8	1	
Do not know	4	80	84	10.9	0.41(0.12,1.35)	0.3(0.07,1.05)
If you are HIV positive, will you disclose?						
yes	96	561	659	85.7	1.4(0.74,2.64)	1.0(0.43,2.29)
no	12	98	110	14.3	1	
Are you willing to let partners to use PITC?			725	93.9		
yes	97	544	643	83.7	1.85(0.96,3.56)	1.4(0.62,3.26)
no	11	114	125	16.3	1	
Healthy looking person can have HIV						
yes	82	376	460	59.7	1.58(0.94,2.67)	1.4(0.73,2.72)
no	20	145	165	21.4	1	
Do not know	6	140	146	18.9	<b>0.31(0.12,0.80)</b>	0.49(0.16,1.4)

\*=1. Indicates that referent group

\*=Statistically significant when  $p < 0.05$



### **HIV testing and counseling practices on PITC acceptance among OPD patients**

The majority 93.8%) (724) of respondents were supported provider initiated HIV testing and counseling. But the initial acceptance rate was 38.2% (108/283) and the overall acceptance rate was 27.2%. Among the study participants 76.3 % ( 589) were tested for HIV previously and 46.8 % ( 272) were tested in the last 6 months. About 53.5% (413) of patients were seen in private hospitals and 46.5 % ( 359) were from public facilities. Only 36.7% (283) of patients were asked by the health care providers for HIV testing. About 85.4 % ( 659) of respondents were willing to start ART based on their CD4 count if they were found to be HIV positive (table3).

Patients who were offered HIV testing and counseling by care providers showed statistically significant positive association to the acceptance of PITC with {OR95%CI=3.67(2.37, 5.67) and AOR95%CI= 4.2(2.38,7.43)}. Respondents who were tested previously for HIV had positive association to the acceptance of PITC on bivariate analysis with {OR95%CI=1.77(1.02, 3.05)} but the positive association did not persist when adjusted to other variables with {AOR95%CI=1.06(0.49, 2.3)}. Respondents from private health facilities were less likely to accept HIV testing than public facilities with {OR95%CI=0.36(0.23, 0.56) and AOR95%CI= 0.33(0.19, 0.58)}. Willingness to start ART, Willingness to accept PITC and Last HIV testing time were not found to reveal statistically significant association to the acceptance of PITC on both bivariate and multivariate analysis (table3).

Table: 3 Distribution of HIV testing and counseling practices on PITC acceptance among OPD patients in Addis Ababa, April, 2011(n=772).

Variables	PITC acceptance		Total		Crude OR( 95%CI)	Adjusted OR( 95%CI)
	Yes	No	No	%		
Willingness to PITC						
yes	106	616	724	93.8	3.96(0.95,16.6)	1.48(0.69,3.18)
no	2	46	48	6.2	1	
Ever tested for HIV						
yes	91	497	589	76.4	<b>1.77(1.02,3.05)</b>	1.06(0.49,2.3)
no	17	164	182	23.6	1	
Last HIV testing						
<6	30	242	272	46.8	0.58(0.33,1.02)	1.4(0.73,2.5)
6 -12	27	126	154	26.5	0.78(0.42,1.44)	1.6(0.87,2.8)
>12			155	26.7	1	1
Providers offered HCT						
Asked and tested	61	191	232	30.1	<b>3.67(2.37,5.67)</b>	<b>4.2(2.38,7.43)</b>
Asked but not tested	39	448	51	6.6	<b>3.5(1.4,8.66)</b>	<b>5.4(2.02,14.68)</b>
Not asked	7	23	488	63.3	1	1
Are you willing to start ART?						
yes	95	562	659	86.1	2.5(0.60,10.79)	1.95(0.44,8.6)
no	2	30	32	4.2	1	
Not sure	8	66	74	9.7	1.82(0.36,9.08)	1.44(0.27,7.6)
Type of h/facility						
government	73	284	359	46.5	1	1
private	35	378	413	53.5	<b>0.36(0.23,0.56)</b>	<b>0.33(0.19,0.58)</b>

\*=Statistically significant when  $p < 0.05$

\*=1. Indicates that referent group

\*= All variables were adjusted for socio-demographic, knowledge, attitude, practice and perception variables

### Reasons for taking provider initiated HIV testing and counseling

Among the reasons for accepting PITC services , 53.3% (216) respondents were believing the health workers initiated it because of some good reasons, 32.8%( 132) were because of the availability of free ART and the remaining 6%(24) for having sign and symptoms of HIV.

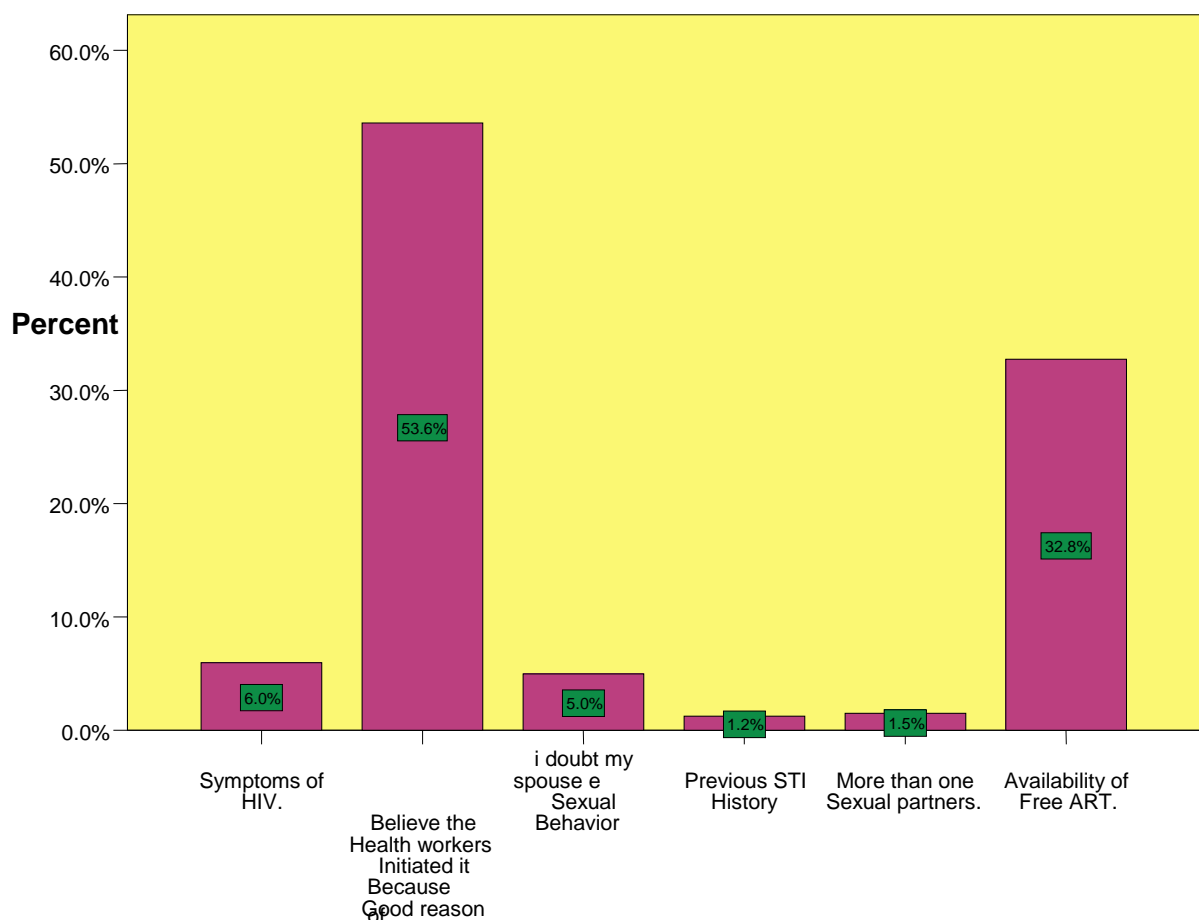


Figure3: Reasons for accepting PITC among OPD patients in Addis Ababa, April, 2011.

### The reasons for refusing PITC services among OPD patients.

Some of the reasons mentioned by the study participants for not accepting PITC were fear of positive test results 38.6% (120), followed by fear of social stigma 27.3% ( 69) and feeling of being safe and no reasons for HIV testing 22.2% ( 67) .

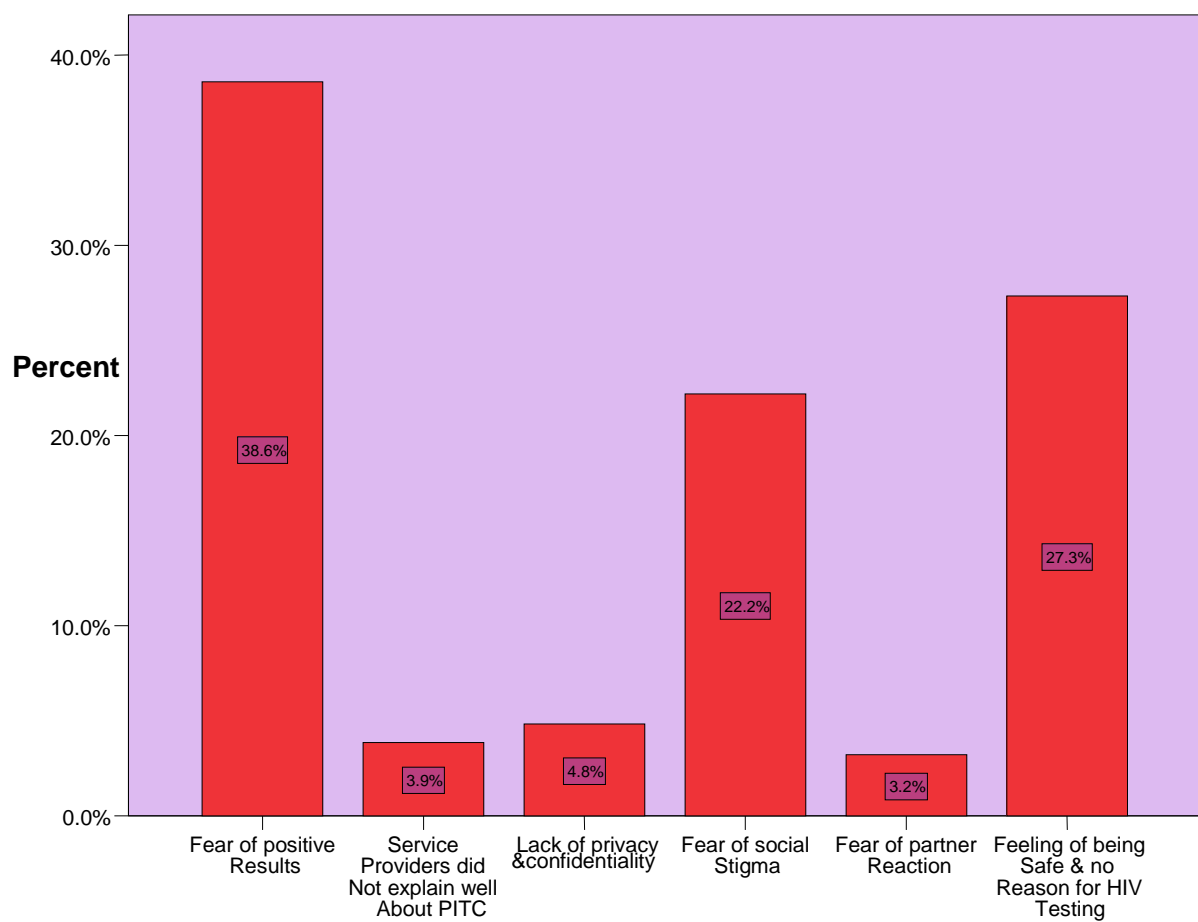


Figure 4: Reasons for refusing PITC services among OPD patients in Addis Ababa, April, 2011.

### **Risk perception and behaviors towards HIV Infection among OPD Patients.**

Among the study subjects 17.7% (136) were found to have High self risk perception for HIV infection. The most suggested factors for high self risk perception were due to different means of HIV transmission 51%, having multiple sexual partners 21% (29), inconsistent condom use 12.3% (17) and had experience of condom breakage 8.7 % ( 12). The most important factors mentioned among respondents with low risk perception for HIV infection were being faithful with one sexual partners 66% (376), no sexual contact 17.7% (101) and consistent condom use 8.2% (47). Regarding the ever used condom, 37.6% (288) of respondents used condom and among them, 37.6% (105) were used condom for contraceptive purpose. About 66.1% (510) respondents had one sexual partner in the last one year. Among the risk behaviors reported for HIV infection occasion of unsafe sex were 6.4 % ( 49), blood contamination with blade or needle sharing were 15.2% (117) and 12.3% (95) of respondents claimed that they might exposed to HIV by helping HIV positive persons (Table 4).

Table 4: Distribution of patient's perception and risk behaviors of getting HIV infection in Addis Ababa, April, 2011(n=772).

Variables	Frequency	Percent (%)
Risk perception		
yes	136	17.7
no	575	74.8
Do not know	58	7.5
Why do you think high risk?		
Df/t means of HIV transmission	70	51.1
Multiple sexual partners	29	21.2
Not used condom regularly	17	12.4
Condom breakage	12	8.8
History of STDS	9	6.6
Why do you think no risk?		
One to one contact only	376	66.0
No sexual contact	101	17.7
Use condom regularly and properly	47	8.2
others	46	8.1
Ever used condom		
yes	288	37.6
no	475	62.0
How do you use condom?		
Contraceptive purpose	105	38.0
New sexual partner	78	28.3
Regularly and properly	64	23.2
Asked by partners	29	10.5
Occasion of unsafe sex		
yes	49	6.6
no	699	93.4
blade or syringe sharing		
yes	117	15.3
no	648	84.7
Exposed to HIV by caring HIV positive person		
yes	95	12.4
no	673	87.6
Were you tested today?		
yes	77	10.0
no	694	90.0

### **HIV risk perception and behaviors on PITC acceptance among OPD patients.**

OPD patients who have high self risk perception and those who did not know their risk of HIV infection were found to have positive association to PITC acceptance and statistically significant with {OR95%CI= 2.3(1.4, 3.7) and 2.58(1.34, 4.96)} respectively. This significant positive relation continued even on multivariate analysis after controlling the effect of confounding for those with unknown risk perception with {AOR95%CI= 2.62(1.35, 5.09)}. The study subjects who have occasion of unsafe sex, claiming exposed to HIV by caring HIV positive persons and blood contamination with blade or needle sharing were found to be important predictors for the acceptability of PITC with {OR95%CI=2.7(1.4,5.2), 1.73(1.04,2.86) and 1.93(1.13,3.3)} respectively. But the positive association was not maintained on multivariate analysis for controlling confounding. The number of sexual partners and condom uses were not statistically significant for acceptance of PITC services (table 5).

Table 5: Distribution of perceived risk and risk behaviors towards PITC acceptance among OPD patients in Addis Ababa, April, 2011(n=728).

Variables	PITC acceptance		Crude OR(95%CI)	Adjusted OR(95%CI)
	Yes	No		
Risk Perception				
yes	30	106	<b>2.3(1.4,3.7)</b>	<b>1.73(1.03,3.09)</b>
no	63	510	1	1
Do not know	14	44	<b>2.58(1.34,4.96)</b>	<b>2.62(1.35,5.09)</b>
Ever used condom				
yes	48	240	1.38(0.91,2.08)	1.17(0.73,1.9)
no	60	413	1	1
Occasion of unsafe sex				
yes	14	35	<b>2.7(1.4,5.2)</b>	2.1(0.99,4.44)
no	90	607	1	1
Blood contact with blade or needle sharing				
yes	24	93	<b>1.73(1.04,2.86)</b>	1.2(0.67,2.18)
no	84	562	1	1
Exposed to HIV by caring HIV positive person				
yes	21	74	<b>1.93(1.13,3.3)</b>	1.46(0.79,2.71)
no	86	585	1	1
Number of sexual partners				
0	23	155	1	1
1	73	436	1.13(0.68,1.87)	1.34(0.77,2.36)
>1	12	70	1.16(0.54,2.45)	0.844(0.35,2.02)

**\*=Statistically significant when  $p < 0.05$**

**\*=1.00 indicates that referent group**

**\* =All variables were adjusted for socio-demographic, knowledge, attitude, practice and perception variables**



**Factors associated with the acceptance of provider initiated HIV testing and counseling (PITC) among OPD patients.**

Patients came to the health facilities with symptoms of TB/STDS and those to chronic illness clinic were found to have positive association for utilization of PITC with {AOR95%CI=3.05(1.13, 8.23) and 2.94 (1.17, 7.33) respectively. Patients attending the private health facilities had lower PITC acceptance rate than those in the public facilities with {AOR95%CI= 0.38(0.21, 0.67)}. The availability of free ART showed a statistically significant positive association for acceptance of PITC with {AOR 95%= 2.2(1.02, 4.63)}. Patients offered HIV testing and counseling by the providers were found to accept PITC five times more than others and it was statistically significant with {AOR95%CI= 4.8(2.7,8.5)} (Table6).

Patients who had knowledge of a healthy looking persons can have HIV infection had positive association with the acceptance of PITC and statistically significant with {AOR95%CI=2.01(1.01, 4.01)} but respondents who did not know whether a healthy looking persons can have HIV infection had a negative association for PITC acceptance with {AOR95%CI= 0.15(0.04, 0.52)}. Respondents who have monthly income of 500-1000 birr were found to have higher PITC acceptance rate with {AOR95%CI= 4.32(1.31, 14.2)} where as patients with primary and tertiary education level were less likely to accept PITC with {AOR95%CI=0.25(0.07, 0.93) and 0.17(0.04, 0.71)}. Patients who were willing to maintain the relationship if their partners become HIV positive were less likely to accept PITC with {AOR95%CI= 0.53(0.30, 0.94)}. Being a house wife by occupation had positive association for PITC acceptance with {AOR95%CI=3.95(1.02, 15.3)} (table 6).

**Table 6: Distribution of independently predictor Factors associated with the acceptance of PITC among OPD patients in Addis Ababa, April, 2011(n=620).**

Variables	PITC acceptance		Crude OR (95%CI)	Adjusted OR(95%CI)
	Yes	No		
Healthy looking person can have HIV				
yes	82	376	1.58(0.94,2.67)	<b>2.01(1.01,4.01)</b>
no	20	145	1	1
Do not know	6	140	<b>0.31(0.12,0.80)</b>	<b>0.15(0.04,0.52)</b>
Sex				
male	46	249	1	
female	62	412	0.82(0.539,1.23)	0.72(0.40,1.3)
Educational status				
illiterate	8	40	1	1
Read-write	6	25	1.2(0.37,3.87)	0.28(0.06,1.29)
primary	23	110	1.045(0.43,2.53)	<b>0.25(0.07,0.93)</b>
secondary	33	180	0.917(0.39,2.13)	0.40(0.12,1.35)
tertiary	38	305	0.62(0.27,1.43)	<b>0.17(0.04,0.71)</b>
Monthly Income				
<300	10	60	1	1
300-500	23	85	1.3(0.55,3.07)	2.31(0.81,6.56)
501-1000	16	74	0.65(0.26,1.6)	<b>4.32(1.31,14.2)</b>
1001-1500	11	102	1.08(0.51,2.3)	1.53(0.45,5.21)
>1501	38	211	1.6(0.7,3.66)	2.17(0.73,6.47)
Marital status				
single	35	264	1	1
married	67	337	1.50(0.966,2.33)	1.45(0.80,2.63)
Divorced/widowed/separated	6	59	0.767(0.31,1.91)	0.52(0.17,1.61)
If free ART is available , will you test for HIV				
yes	93	501	<b>3.7(1.34,10.38)</b>	<b>2.2(1.02,4.63)</b>
no	10	81	1	1
Occupation				
employed	55	355	0.78(0.42,1.42)	0.86(0.40,1.87)
House wife	16	89	0.899(0.4,1.9)	<b>3.95(1.02,15.3)</b>
student	9	76	0.59(0.25,1.4)	1.1(0.98,12.48)
merchant	12	62	0.968(0.43,2.19)	0.75(0.26,2.13)
Unemployed	9	49	0.81(0.28,2.4)	2.37(0.54,10.4)
Farmer/servant/daily laborer	7	31	1	1

Age				
15-24	16	157	0.645(0.24,1.76)	0.66(0.17,2.64)
25-34	49	247	1.256(0.504,3.134)	1.67(0.55,5.05)
35-44	24	143	1.063(0.406,2.786)	1.78(0.55,5.82)
45-54	11	73	0.954(0.33,2.78)	1.31(0.37,4.64)
>55	6	38	1	<b>1</b>
Will you maintain your relationship if partners become HIV positive				
yes	61	443	<b>0.64(0.42,0.97)</b>	<b>0.53(0.30,0.94)</b>
no	47	219	1	<b>1</b>
Offered HCT				
asked & tested	56	175	<b>3.669(2.37,5.67)</b>	<b>4.8(2.7,8.5)</b>
Asked but not tested	12	309	<b>3.496(1.41,8.66)</b>	1.70(0.54,5.30)
Not asked	39	448	1	
Perceived risk				
yes	30	106	<b>2.29(1.4 ,3.71)</b>	1.4(0.76,2.7)
no	63	510	1	
Type of H /facilities				
government	73	284	<b>1</b>	<b>1</b>
Private	35	378	<b>0.36(0.234,0.56)</b>	<b>0.38(0.21,0.67)</b>
Reasons for attending				
Symptoms of TB/STDS	20	64	<b>3.94(1.85,8.39)</b>	<b>3.05(1.13,8.23)</b>
Chronic illness clinic referrals	25	105	<b>3.00(1.47,6.13)</b>	<b>2.94(1.17,7.33)</b>
General check up	10	47	<b>2.68(1.107,6.5)</b>	1.38(0.43,4.46)
Psychosomatic/GIT	38	277	1.73(0.90,3.34)	1.68(0.75,3.80)
	13	164	<b>1</b>	

**\*=Statistically significant when  $p < 0.05$**

**\*=1. Indicates that referent group**

**\*=All variables were adjusted for socio-demographic, knowledge, attitude, practice and perception variables**

## 7. DISCUSSION

The study showed that the overall provision of PITC in the outpatient department was 36.7%.

Similar results was found in Dessie town which showed 23.9% of patients visited the health facilities were initiated for HIV testing and 76.1% were missed the opportunities of having HIV testing and diagnosis(51).

The initial willingness to accept the test was 38.2 %. But the overall PITC utilization rate among those who offered the PITC services was 27.2%. This result was higher in comparison to Zambian study which showed 11.8% VCT acceptance among respondents in a clinic setting (41) but this finding was low in contrast to other studies done in Arba Minch Hospital(50) and Dessie town which showed 73% willingness to be tested and the overall acceptability rate of 35%(51). And a study in Addis Ababa among clients with signs and symptoms of HIV infection revealed the overall acceptability rate was 67% (37). The lower test acceptance rate of our study in comparison with this study might be because all the outpatient clients who didn't present with HIV sign and symptoms were included.

This study showed that those Patients who offered HIV testing and counseling by the health care providers were found to accept HIV testing five times higher than those not offered. Similar results were reported from a study in Adama town among TB patients (38).

This study also revealed that patients who had knowledge of healthy looking persons can have HIV infection were more likely to accept HIV testing. This was concurrent with study in north west Ethiopia(36). But those patients who did not know whether healthy looking persons can have HIV infection were less likely to accept HIV testing than those who knew. This was also similar with a study done in South Africa, North West Ethiopia and USA identified that lack of awareness and knowledge towards HIV was major barriers for HIV testing (35, 36, 40).

This study demonstrated that patients who were willing to maintain the relationship if their partners become HIV positive were found to have less likely to accept HIV testing and counseling. This might be due to fear of positive results, stigma and discrimination as noted by the other variable of this study (35, 36, 40).

This study identified that Patients who had high perceived risk for HIV infection were two times more likely to accept HIV testing than those who perceived low risk on bivariate analysis but had no association on multivariate analysis. Similar results were reported in Dire Dawa (45), and Adama(38). In the contrary, a study from Arba Minch(50), Thailand (46) and Zambia (41) showed that high risk perception for HIV acquisition was a major motivators for seeking HIV testing.

This study showed that HIV testing and counseling was offered to 40.6% and 33.3% of respondents in public and private health facilities respectively. The rate of acceptance was significantly higher among respondents in the public hospitals than in private hospitals which was similar with a study done in Cameroon (42). This may be due to cost issues that patients were asked additional fee for HIV test in the private sectors.

This study identified that patients with primary and tertiary level of education had lower rate of acceptance of PITC than those with lower education which was similar with a study in Nigeria (47) and Ethiopia(44). This could be due to the fact that as people's knowledge increases about the serious health consequences to the extent of death and the society's reaction to the disease, which is stigma and discrimination, people could decline to accept HCT despite good knowledge. Supporting this rational, it is also shown in a number of studies that knowledge only does not necessarily bring about attitude and behavioral change. On the contrary, studies from Zimbabwe (39), Kenya(48), north west Ethiopia (36) and Adama TB patients (38) and ANC clients (43) Showed that patients who had higher education had higher acceptance rate for HIV testing.

This particular study also revealed that monthly income of the family between 500-1000birr was associated with high acceptance of HIV testing as compared to those who had lower income. This was in line with other studies in Dire Dawa, Addis Ababa, Adama in TB and ANC clinic (38, 43, 45, 49) and Kenya (48). The possible explanation for the association between income with acceptance of HCT could be that those patients who had better income could have a better access to health facilities, which resulted them an opportunities to access health information which can ultimately influence their decision for HIV testing.

This study showed that being a house wife by occupation had positive association for high PITC acceptance than others. Similar studies from Addis Ababa(43)and Dire dawa (45) showed that women who were married and their partners live at home were more likely to accept PITC. Also a study in Asia showed that women were tested for HIV because of their partners' ill health (32).

In this study the availability of free ART had positive association for the acceptance of HIV testing among OPD patients. This was similar with studies in Gondar and Adama (44, 49).

This study identified that the acceptance of PITC among patients attending the health facilities with problems of chronic illness and symptoms of TB and STDS had found to be three times higher than other patients. In agreement with this finding, most studies done on TB and STI clinics in Ethiopia, Africa and India demonstrated high PITC acceptance rate in STI and TB patients (31, 33, 36, 38).

Fear of positive test results, fear of social stigma and discrimination, fear of confidentiality issues and partner reaction and feeling of being safe were the most important reasons mentioned among respondents who refused to accept HIV testing and counseling. Similar findings were observed from other studies in Ethiopia, Africa, Thailand and USA (35, 36, 40, 46).

**Strength of the study**

There were limited studies on this particular area in Addis Ababa .This study may be used as base line data for future studies and also the study included both government and private hospitals resulted in good representativeness.

**.Limitations of the study**

Although this study identified several predictors of HIV counseling and testing using quantitative methods, it has some limitations. The limitation of this study includes difficulty of ascertaining temporal relation from a cross sectional studies. Moreover, the study was conducted in the health facilities which might lead to selection bias and study populations were more of urban affiliated population hence, generalization to rural community may be difficulty due to under representation of rural community.

## **8. CONCLUSIONS**

- This study demonstrated that the provision of PITC among patients visiting outpatient department was low which indicated missed opportunities among OPD patients were very high.
- The low utilization rate(27%) of HIV counseling and testing among OPD patients poses a challenge to all effortful activities for the prevention of HIV transmission, early linkage to HIV care, treatment and support services.
- This study identified that Patients offered HIV testing and counseling by the health care providers, Being house wife by occupation, patients who had knowledge of healthy looking persons can have HIV infection, the availability of free ART, high monthly income and patients visiting health facilities with symptoms of TB/STI were found to have positive predictors for high PITC acceptance rate.
- Higher education, patients who were willing to maintain their relationship if their partners become HIV positive, patients in the private health facilities and patients who did not know whether healthy looking persons can have HIV infection were major predictor's for low PITC acceptance rate.
- Fear of positive test results, fear of social stigma and discrimination, fear of confidentiality issues and partner reaction and feeling of being safe were the most important reasons mentioned among patients who refused to accept PITC.



## **9. RECOMMENDATIONS**

- ❖ The health care providers should follow the national guide lines and need to be actively involved in the initiation of HIV testing and counseling to all patients attending health facilities.
- ❖ The responsible health planners and programmers should launch monitoring system for the implementation, strengthening, sustaining and scaling up of PITC in the outpatient department.
- ❖ Knowledge and awareness creation about the benefit of PITC through continuous health education should be strengthened by health professionals, health facilities and health programmers.
- ❖ Health programmers and planners should give attention to the outpatient department in the issue of routine opt out HIV testing and counseling so as to minimize the missed opportunities and increase the utilization rate.
- ❖ Health programmers and planners should launch a monitoring system for the implementation of PITC in the private health facilities
- ❖ Further studies are highly recommended to determine factors hindering PITC utilization and provision among service providers.

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## 11. ANNEXES

### Consent form

Date;:.....

**Introduction; Hello,** madam/sir.

My name is .....and working as nurse by occupation and work at.....

We are conducting study to assess utilization of PITC services and factors affecting its acceptance among patients visiting this institution and would be grateful if you would take few minutes to answer some questions. The information collected will help health institution to improve the quality of PITC services it provides at general outpatient department and as a whole.

**Confidentiality and informed consent statement;** I am going to ask you questions about the services you received today. I will not record your name and I would like to assure you that confidentiality will be kept throughout. Your privacy will be protected and no one identifies your answer. If you do not wish to participate, it will not affect the services you get at the hospital. There are also other patients who are selected like you, so the information you are requested to provide is very important for further study and to design appropriate prevention strategy of HIV/AIDS.

Besides, you have full right to participate or to discontinue at any time or not to participate in the study at all. Your participation in this study does not involve any direct risk or benefit for you but is very useful since your answers will help to improve the services offered to you in this health facility and elsewhere. Are you willing to participate in the study?

**Interviewer:** informed verbal consent obtained from participants and confidentiality must secure at all level and sign below to certify that the research conducted as stated by consent



form and ethical section of research protocol. Thank you! If you have any question related to the questioning, you can contact us at any time through

**Tele: +251-911-735-237**

**E-mail –getasewg@gmail.com**

**Data collector's signature-----**

## Annex II: Questionnaire: English Version

### Identification

Date	
Region	
Sub city	
Keble	
Name of the Hospital	

### Part I: Reasons for visiting health facilities

Number	Questions	Response
<b>100</b>	What was the reason for your visit today?	1. Symptoms of TB/ cough >2weeks,wt loss, fever etc/ 2. Symptoms of STI/ discharge, swelling , ulcer of genital organs etc/ 3. Follow up to chronic illness/ hypertension, diabetes mellitus, lung problem etc/ 4. Referrals from other center 5. General medical check up 6. Other

### Part II: Socio-demographic characteristic

<b>101</b>	Place of residence /address/	1. Urban 2. rural
<b>102</b>	sex	1. Male 2. Female
<b>103</b>	Age in complete years	<div style="border: 1px solid black; width: 80px; height: 20px; margin-bottom: 5px;"></div> I do not know.....2

<b>104</b>	Educational status	1. Unable to write and read 2. Write and read 3. Completed grade 1-4 4. Completed grade 5-8 5. completed grade 9-10 6. completed grade 11-12 7.tertiary>12
<b>105</b>	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other_____
<b>106</b>	Ethnicity	1. Amhara 2. Oromo 3. Tigre 4. Gurage 5. Others
<b>107</b>	What is your current occupation?	1. Government employee 2. Private employee 3. House wife 4. Daily laborer 5. Housemaid/servant 6. Merchant 7. student 8. Others(specify)_____
<b>108</b>	What is your average monthly income?	1. <300 Eth. Birr 2. 301-500 3. 501-1000 4. 1001-1500 5. >1501

109	What is your current Marital status?	1. Single 2. Married 3. Divorced 4. Widowed 5. Separated
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**Part III: knowledge about HIV**

201	Have you ever heard about HIV?	1. yes 2. No
202	knowledge about means of HIV transmissions(at least three- unprotected sex, blood contact due to blade or syringe sharing and mother to child transmission.)	1. yes 2. no
203	DO you know people with HIV?	1. yes 2. no
204	If you know your close friend or partner turns out to be positive what would happen to your friendship?	1. I will automatically stop my friend ship relation ship 2. I will slowly withdraw my friend ship 3. I will maintain my friendship despite his/her HIV status 4. it is very difficult to answer
205	Do you know people who died of HIV?	1. yes 2. no
206	What is the impact of availability of free ART services to ward HIV counseling and testing services?	1. it encourages people to be tested for HIV 2. it does not encourage people for HIV testing 3. I do not know
207	If you turn to be HIV positive, would you tell to your close friend or sexual partner?	1. yes 2. no 3. I do not have sexual partner

208	Are you willing to let partner or member of your family to use PITC?	1. yes 2. no
209	knowledge about risk factors/behaviors/ predisposing to HIV infection (at least three factors mentioned-other infection like STDS,TB, lack of condom use and condom breakage, multiple sexual partner, substance abuse& Iv drug users)	1.yes 2.no

#### Part IV. Attitude towards HCT

301	If your health care provider initiates you for HIV counseling, do you agree to accept it?	1. yes 2. no
302	Have you ever been tested for HIV?	1. yes 2. no
303	Date or year of last HIV testing (in months)	<input type="text"/>
304	Has OPD service providers ever offered you HIV counseling and testing?	1. Yes ,I was asked by service provider and tested for HIV 2. I was asked by service provider but I did not tested for HIV 3. No, I did not asked by service provider for HIV testing 4. I do not remember 5. Other
305	Were you asked by the service provider today whether you are willing to have HIV test?	1. yes 2. no
306	Were you tested today?	1. yes 2. no
307	If you are found to be HIV	1. yes

	positive, Are you willing to start ART based on your CD4 status?	2. no 3. I am not sure
--	--	---------------------------

**Part V: Reasons in order to undergo PITC**

401	If you accepted PITC services today, what were your reasons for having PITC?	1. Having sign and symptoms of HIV 2. accept the PITC services because I believe the health workers initiated it because of good reasons 3. I doubt my husband/wife sexual behavior 4. because of my previous STIS history 5. because I have more than one sexual partners 6. because of the availability of free ART 7. other
402	If you refused having PITC service today, What was your reason for declining PITC services?	1. fear of positive test results 2. service providers did not explained well about PITC 3. due to lack of privacy 4. due to lack of confidentiality issues 5. fear of social stigma 6. fear of partner reaction 7. feeling of being safe and no reasons for HIV testing 8. other/specify

**Part VI: patient risk perception for HIV infection/perceived behavior/**

501	Do you feel I am at high risk for HIV?	1.yes 2. no 3 .I do not know	if yes go to 502 if no go to 503 if I do not know go to 504
502	Why do you think you have high risk?	1.I have multiple sexual partners 2. I do not use condom regularly 3. I had experienced condom breakage 4. I have history of STDS/STIS 5. others	
503	Why do you think you have no risk?	1. I have no sexual contact 2. I have one to one sexual contact only 3. I have one to one only relationship with tested partner 4. I use condom regularly and properly 5. others	
504	Have you ever used condom? Male or female condom?	1. yes 2. no	If yes go to 505 If no go to 506
505	If you used condom for protection of STD/HIV, did you use condom regularly and correctly?	1. whenever I have new sexual partner 2. I used condom for contraceptive purpose 3. whenever I have sexual relationship other than my husband or wife or regular sexual partner	

506	How many sexual partners do you have in the last one year?	<input type="text"/>	
507	Did you have any occasion of unsafe sex with people whom do you suspected as HIV positive person?	1.yes 2. no	
508	Do you have any occasion of blood contact, blade or needle sharing with other persons?	1. yes 2. no	
509	Do you think you might have been exposed to HIV because you are helping HIV positive persons?	1.yes 2.no	

Thank you for your participation



ቅጥያ አንድ፡ የፍቃደኝነት መጠየቂያ ቅጽ

በአዲስ አበባ ከተማበሚገኙ የጤና ተቋማት ውስጥ ለተመለሰ ህክምና ተጠቃሚዎች በህክምና ባለሙያ አነሳሽነት የሚሰጠውን የኤች አይቪ ምክርና ምርመራ አገልግሎት አሰጣጥ፣ ተጠቃሚነትና አገልግሎቱን በሚገድቡና በሚያበረታቱ ምክንያቶች ላይ የሚደረግ ጥናት

ቀን -----

መግቢያ፡ ጤና ይስጥልኝ ስሜ-----ይባላል ሙያዬ ነርስ ነው የምሰራው በ-----ድርጅት ውስጥ ነው።

በባለሙያ አነሳሽነት የሚሰጠው የኤች አይቪ ምርመራ አገልግሎት የሚገድቡና በሚያበረታቱ ምክንያቶችን ለማወቅ የተመለሰ ህክምና ተጠቃሚዎችን ማእከል አድርገን ጥናት እያደረግን ነው። በዚህ ጥናት ላይ የተዘጋጁ ጥያቄዎችን በመመለስ ተሳትፎ በያደርጉልን እጅግ ይስይላል። በዚህ ጥናት የሚሰበሰቡ መረጃ ለጤና ተቋሙ በሌሎችም መሰል ጤና ተቋማት የጤና አገልግሎትን ጥራት ለማሻሻል በይበልጥ ደግሞ ለተመለሰ ህክምና ማእከል ተጠቃሚዎች በባለሙያ አነሳሽነት የሚሰጠውን የኤች አይቪ ምርመራና ምክር አገልግሎት በስፋት እንዲጠቀሙ ይረዳል።

ምስጢር መጠበቅና ስምምነትን በተመለከተ፣ ዛሬ በዚህ ጤና ተቋም ውስጥ ባገኙት አገልግሎት ላይ ጥያቄዎች እንጠይቀዎታለን የመጠይቁ ወረቀት ላይ ስምዎት አይሞላም። የሚሰጡን መረጃ ምስጢራዊነት እንጠብቃለን፤ ማንም ከጃጋር ስለተወያዩት ነገር እንዲያውቅ አይደረግም። በዚህ ጥናት ላይ ባይሳተፉ አሁንም ሆነ ወደፊት ከዚህ ጤና ተቋም በሚያገኙት አገልግሎት ላይ ምንም አይነት ችግር አያስከትልም። መመለስ የማይፈልጉት ጥያቄ ካለ የመመለስ ግዴታ የለብዎትም። ከፈለጉ ቃለ መጠይቁን በማንኛውም ሰዓት ማስቆም ይችላሉ። በዚህ ጥናት ላይ በመሳተፍዎ የተለየ ጥቅምም ሆነ ጉዳት አያስከትልብዎትም፤ ይሁን እንጂ በዚህ ጥናት በመሳተፍዎ የኤች አይቪ ኤድስን የምርመራና የምክር አገልግሎትን በማሻሻል ረገድ ፋይዳ ያለው መረጃ እናገኛለን።

ለቃለ መጠይቅ አድራጊው፣ በጥናቱ ላይ ለሚከፈሉ የተመላላ ሽህክምና ማእከል ተጠቃሚዎች ቢያንስ የቃል ፍቃድ መኖሩን ማረጋገጥ ይጠበቅበዎታል፤ በተጨማሪም በትናፍቅ ፕሮፖዛል ላይ ያሉትን የስነ ምግባር ደንቦች በመሉ ስለመከበራቸው ከታች ባለው ክፍት ቦታ ላይ ይፈርሙ ካልሆነ ግን ታካሚውን አስናብተው መጠይቁን ፋይል አድርገው ያስቀምጡ።

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የጠያቂው ፊርማ-----

ቅጥያ ሁለት፡ የመጠየቂያ ቅጽ

1. የመለያ መረጃ

ቀን	
ክልል	
ክ/ከተማ	
ቀበሌ	
የሆስፒታሉ ስም	

2. የተመላላ ሽህክምና ተጠቃሚዎች ወደ ተቋሙ መጠበቅን ምክንያት ለማወቅ የቀረበ መጠይቅ

ኮድ	ጥያቄ	መልስ
100	በዛሬው እለት ወደዚህ ሆስፒታል እንዲመጡ ያደረገዎት ምክንያት ምንድን ነው?	<p>1. የሣንባን ቀርሣ ህመም ምልክቶች ስለሚታይብኝ/ከ 2ሳምንት በላይ የቆዬ ሳል፣ ክብደት መቀነስ፣ ወዘተ/</p> <p>2. የአባላዘር ህመም ምልክቶች ስለሚታይብኝ /የብልት መቁሰል፣ እብጠት፣ ፈሳሽ፣ ወዘተ/</p> <p>3. የቆዬ ህመም ስላለኝ ክትትል ለማድረግ/የደም ግፊት ፣ ስኳር ፣ አስም፣ የልብ ህመም ፣ ወዘተ/</p> <p>4. ከሌላ የጤና ተቋም ላይ ህክምና ተልኬ</p> <p>5. ለአጠቃላይ ሜዲካል ምርመራ</p> <p>6. ሌላ/ይገለጽ/</p>

3. የግለሰባዊና ማህበራዊ ታሪክ መጠየቂያ

101	አድራሻ	1.አዲስ አበባ 2.ክ/ሀገር
102	ጾታ	1.ወንድ 2.ሴት
103	እድሜ	<input type="text"/> በአመት  አላውቀውም.....2
104	የትምህርት ደረጃ	1. መጻፍት ማንበብ የማይችል 2. መጻፍት ማንበብ የሚችል 3. ከ 1-4ኛ ክፍል 4. ከ 5-8ኛ ክፍል 5. ከ 9-10ኛ ክፍል 6. ከ 11-12ኛ ክፍል 7. ከ 12ኛ በላይ
105	ሀይማኖት	1. አርቶዶክስ 2. መስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ _____
106	ብሔር	1. አማራ 2. አሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌላ -----
107	ስራ	1. የመንግስት ተቀጣሪ 2. የግል ተቀጣሪ 3. የቤት እመቤት 4. የቀን ሠራተኛ 5. የቤት ሰራተኛ 6. ነጋዴ 7. ገበሬ

		8. ተማሪ 9. ሌላ (ይገለጽ) _____
108	ወርሀዊ ገቢ	1. ከ 300 ብር በታች 2. ከ 301-500 ብር 3. ከ 501-1000 ብር 4. ከ 1001-1500 ብር 5. ከ 1501 ብር በላይ
109	የጋብቻ ሁኔታ	1. ያላገባ/ች 2. ያገባ/ች 3. የፈታ/ች 4. የሞተበት/ባት 5. የተለያየ

#### 4. ስለ ኤች.አይ.ቪ. ያላቸውን እውቀት መጠየቂያ

201	ስለ ኤች.አይ.ቪ ሰምተውያውቃሉ?	1. አዎ 2. አልሰማሁም
202	ከኤች.አይ.ቪ ሙሉ ለራሽ መንገዶች ቢያንስ ሰስቱን ቢገልጹልኝ? /- የግብረ-ሥጋ ግንኙነት፤ የደም ንክኪን ያስከተለ በስለት መቆረጥና ከእናት ወደ ልጅናቸው/	1. ገልጸዋል 2. አልገለጹም
203	ኤች.አይ.ቪ በደመ/ሟ/ ውስጥ የሚገኝበት/ባት/ ሰውያውቃሉ?	1. አዎ 2. አላውቅም
204	የቅርብ ጓደኛዎ ወይም ፍቅር ጓደኛዎ ኤች.አይ.ቪ በደመ/ሟ/ ውስጥ እንዳለበት /ባት/ ቢያውቁ ምን ያደርጋሉ?	1. ወዲያውኑ እለያለሁ 2. ቀስ በቀስ ጓደኝነቴን አቋርጣለሁ 3. ጓደኝነቴን እቀጥለሁ 4. ለመመለስ እችላለሁ
205	በኤ.አይ.ቪ /ኤድስ/ ምክንያት ህይወቴን /ቷን/ ያጣ/ች/ሰውያውቃሉ?	1. አዎ 2. አላውቅም

206	የኤች አይ ቪ መድሃኒት በነጻ መቅረቡ በኤች አይ ቪ ምርመራ ማድረግ አለማድረግ ላይ ምን ተጽእኖ አለው?	1.ያደፋፍራል 2.አያደፋፍርም 3.አላውቅም
207	ኤች አይ ቪ በደም ውስጥ ቢገኝ ለቅርብ ጓደኛዎ/ጓደኛ፤ ፍቅረኛ፤ ቤተሰብ/ይነግራሉ?	1.አዎ 2.አልነግርም 3.የፍቅር ጓደኛ የለኝም
208	በህክምና ባለሙያ አነሳሽነት የሚደረገውን የኤች አይ ቪ ምርመራ የፍቅር ጓደኛዎ ወይም ቤተሰብዎ እንዲጠቀምበት ያደርጋሉ?	1.አዎ 2.አልመክርም
209	ለኤች አይ ቪ የሚያጋልጡ ባህሪያትን ቢያንስ ሶስቱን ይግለጹልኝ ?/-ከአንድ በላይ የወሲብ ጓደኛ፤ የአባላዘር በሽታ፤ የሳንባ ነቀርሳ፤ ኮንዶም አለመጠቀምና የኮንዶም መቀደድ፤ አደንዛዥ እፅ ተጠቃሚ መሆን/ወዘተ	1.ገልጸዋል 2.አልገለጹም
210	አንድ ጤኝ ሰው የኤች አይ ቪ ቫይረስ በደሙ ውስጥ ሊኖር ይችላልን?	1.አዎ 2.አይችልም 3.አላውቅም

5. ስለ ኤች አይ ቪ/ኤድስ /ደም ምርመራ ያላቸውን ተነሳሽነት ለማዎቅ የቀረበ ጥያቄ

301	በጤና ባለሙያ የኤች አይ ቪ/ኤድስ /ደም ምርመራ እንዲያደርጉ የምክር አገልግሎት ቢሰጠዎት የደም ምርመራ ለማድረግ ፍቃደኛ ነዎት?	1. አዎ 2. አይደለሁም
302	ከዚህ በፊት ለኤች አይ ቪ የደም ምርመራ አድርገው ያውቃሉ?	1. አውቃለሁ 2. አላውቅም
303	የኤች አይ ቪ ደም ምርመራ ካደረጉ በአጠቃላይ ስንት ጊዜ ሆነዎት/በወራት ወይም በአመት /	.....

	ቢነ ግሩኝ	
304	ከዚህ በፊት በተመለሰሽ ህክምና አገልግሎት ሰጪባለሙያዎች አይሺ ምርመራ እንዲያደርጉ ተጠይቀው ያውቃሉ?	1. አዎ፣ ተጠይቄ ተመርምረክለሁ 2. አዎ፣ ግን ምርመራውን አላደረግሁም 3. የለም፣ አልተጠየኩም 4. አላስታውስም 5. ሌላ
305	በዛሬው እለት በተመለሰሽ ህክምና አገልግሎት ሰጪባለሙያዎች አይሺ ምርመራ እንዲያደርጉ ተጠይቀዋል?	1. አዎ፣ ተጠየቄአለሁ 2. አልተጠየኩም
306	በዛሬው እለት የኤች አይ ሺ ምርመራ አድርገዋል?	1. ተመርምረክለሁ 2. አልተመረመርኩም
307	ኤች አይ ሺ በደምዎ ውስጥ ቢገኝና ህክምና መጀመር የሚያስፈልገው ደረጃ ላይ ቢደርሱ የፀረ-ኤች አይ ሺ መድሃኒት ይጠቀማሉ?	1. አዎ እጠቀማለሁ 2. አልጠቀምም 3. እርግጠኛ አይደለሁም

6. በተመለሰሽ ህክምና አገልግሎት ሰጪ የጤና ባለሙያ አነሳሽነት የኤች አይ ሺ ምርመራ ለማድረግና ላለማድረግ የሚያበቁ ምክንያቶችን ለማወቅ የቀረበ ጥያቄ

401	በባለሙያ አነሳሽነት የሚደረግ የኤች አይ ሺን ምርመራ ለመቀበል ያነሳሰዎትን ምክንያቶች ቢገልጹልኝ?	1. የኤች አይ ሺ ህመም ምልክቶች ስለሚታይብኝ 2. ባለሙያው/ዋ/የደም ምርመራውን ያነሳበት /ችበት/ በቂ ምክንያት አለ ብዬ ስላስብኩ 3. ባለቤቴን ስለምጠረጥራት/ረው/ መመርመሩን መርጫለሁ 3. ከዚህ በፊት የአባላዘር በሽታ ይዞኝ ስለነበር ለመመርመር ወሰን ኩ 4. ከአንድ በላይ የወሲብ ጓደኛ ስላለኝ 5. የጸረ-ኤች አይ ሺ መድሃኒት በነጻ መኖሩን ስለተረዳሁ 6. ሌላ/ይገለጽ/
402	በባለሙያ አነሳሽነት የሚደረግ የኤች አይ ሺ ምርመራ ለመቀበል ያልፈለጉበት/የሚገድቡ	1. የኤች አይ ሺ ፖዘቲቭ ውጤትን ስለምፈራ 2. የጤና ባለሙያው/ዋ/ ስለኤች አይ ሺ ምንም አይነት ገለጻ ስላላደረገልኝ

	/ምክንያቶችን ቢገልጹልኝ?	<p>3. ስለ ኤች አይቪ ነጻ የመወያያ ቦታ ስለሌለ</p> <p>4. የኤች አይቪ የደም ምርመራ ውጤትን በሚስጥር አይያዝምብዬ ስለሰጋሁ</p> <p>5. ከህብረተሰቡ መግለልን በመፍራት</p> <p>6. ከትዳር /ወሲብ /ዳደኛዬ ሊደርስብኝ የሚችለውን ጫና በመፍራት</p> <p>7. ነጻ ነኝ ብዬ በራሴ ስለምተማመንና ምንም ለኤች አይቪ የሚያጋልጥ ገጠመኝ ስለሌለኝ</p> <p>8. ሌላ /ይገለጽ/</p>
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7. ስለ ኤችአይቪ ሻይረስ የሚያጋልጡ የበሽተኛው ውስጣዊ አመለካከትና ባህሪን ለማወቅ የተጠየቀ

501	ለኤች አይቪ ሻይረስ ተጋላጭ እሆናለሁ ብለውያስባሉ?	<p>1. አስባለው</p> <p>2. አላስብም</p> <p>3. አላውቀውም</p>	<p>አላስብም ካሉ ወደ 50</p> <p>አላውቀውም ካሉ ወደ 50</p>
502	ለኤች አይቪ ሻይረስ ለምን ተጋላጭ እሆናለሁ ብለውያስባሉ?	<p>1. ከአንድ በላይ የወሲብ ዳደኛ ስላለኝ</p> <p>2. ብዙ ጊዜ ኮንዶም ባግባቡ ስለማልጠቀም</p> <p>3. የኮንዶም መቀደድ አጋጣሚዎች ስለነበሩ</p> <p>4. ከዚህ በፊት የአባላዘር በሽታ ታምሜስለነበር</p> <p>5. ሌላ /ይገለጽ/</p>	
503	ለኤች አይቪ ሻይረስ የመጋለጥ እድል የለኝም ብለውያስባሉ ለምን?	<p>1. የወሲብ ግንኙነት ስላልጀመርኩ</p> <p>2. አንድ ለአንድ ብቻ ተወስኜ ስለምኖር</p> <p>3. በጋራ ተመርምረን ውጤትን ካወቅሁት አንድ ሰው ጋር ተወስኜ ስለምኖር</p> <p>4. ኮንዶምን ባግባቡና</p>	

		ሁሌም ስለ ምጠቀም 5. ሌላ /ይገለጽ/	
504	ኮንዶምኒየም ተጠቅሞ የውቃላት/የወንድ ወይም የሴት/?	1. አውቃለሁ 2. አላውቅም	አላውቅም ካሉ ወደ 50
505	የአባላዘር በሽታና ኤች አይቪን ለመለከል ኮንዶምኒየም እጠቀማለሁ ከሉ፤ በምን አይነት ሁኔታ ነው የሚጠቀሙት	1. ከአዲስ ፍቅረኛዬ ጋር 2. እርግዝና እንዳይከሰት በማስብበት ጊዜ 3. ከባለቤቴ ወይም ከፍቅረኛዬ ውጭ ወሲብ በምፈጽምበት ጊዜ 4. በባለቤቴ ወይም በወሲብ ጓደኛዬ ጥያቄ 5. ሁልጊዜና ባግባቡ	
506	ባለፈው አንድ አመት ውስጥ ስንት የወሲብ ጓደኛ ነበረዎት?		
507	ኤች አይቪ ቫይረስ በደመጫ/ውስጥ ሊገኝበት/ባት/ይችላል ብለው ከማሰጉት ሰው ጋር የወሲብ ግንኙነት ፈጽሞውያውቃሉ?	1. አውቃለሁ 2. አላውቅም	
508	የደምን ክኪን ያሰከተለ በስለት መወጋት ወይም መቆረጥ አጋጥሞዎት ያውቃል?	1. አዎ 2. አያውቅም	
509	ኤች አይቪ ቫይረስ በደመጫ/ ውስጥ የሚገኝበት/ባት/ን ሰው በቅርብ በመደገፊና በመንከባከቤ ምናልባት ለኤች አይቪ ቫይረስ ተጋልጬ ይሆናል ብለው ይሰጋሉ?	1. አዎ እስጋለሁ 2. አልሰጋም	

በዚህ ጥናት በመሳተፍዎ ከልብ አመሰግናለሁ፡፡



